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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,911	01/02/2001	Yoshifusa Hayama	5905.0034-01	7998

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EXAMINER

JANKUS, ALMIS R

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 07/21/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,911

Applicant(s)

HAYAMA ET AL.

Examiner

Almis R Jankus

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28,30 and 34 is/are allowed.
- 6) ☒ Claim(s) 21-27, 29, 31-33, 35-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments with respect to claims 21 and 35 have been considered but are moot in view of the new ground(s) of rejection.

2. Claims 21-27, 29, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strandberg in view of Watt et al. and further in view of Kakizawa et al. (US Pat. 5,966,132).

With respect to claim 21, Strandberg teaches the claimed presentation control means for controlling the presentation of an image containing said object which changes in shape, at figure 1, at the abstract, and the object changing in shape, at column 5 lines 60-67; viewpoint determining means for determining the position of a viewpoint for capturing an image containing said object by means of said presentation control means, at column 11 line 32 to column 12 line 5; and recording means for recording an image obtained from the viewpoint determined by said viewpoint determining means, at column 8 lines 7-9.

While Strandberg teaches most features claimed, it is noted that the viewpoint corresponding to a virtual camera that captures motion of the object, and the position of the viewpoint being determined based on a player's operation, is not explicitly taught. However, Strandberg teaches viewing the object in three-dimensional space (see the EXAMPLE at column 11); and, Watt et al. teaches that a virtual camera is often used as

a conceptual aid in computer graphics, at pages 7-8 at section 1.2.3. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use this conceptual aid because the virtual camera can be positioned anywhere in world coordinate space and pointed in any direction – the view direction.

Further, Strandberg does not explicitly teach determining the position of the viewpoint continuously in real-time based upon a player's operation. However, Kakizawa et al. teaches this at column 1 lines 12-43, column 2 line 42 to column 3 line 6, and column 4 lines 7-35. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use this feature because the realism of the image displayed can be enhanced to simulate the experience of a virtual 3D space.

Claim 22 further requires the presentation control means to change the shape of said object on the basis of data obtained by capturing the movement of each part of an object moving in a real space. Strandberg teaches this at column 4 lines 7-15.

Claim 23 further requires said presentation control means to use texture data obtained by scanning a portion of said object by means of a three-dimensional scanner as texture data for a portion of said object. The instant specification defines texture data as "representing red (R), green (G), and blue B lights". These are merely the three color components used in color displays. Strandberg teaches using and changing colors at column 3 line 59 to column 4 line 4.

Claim 24 further requires said presentation control means to select, on the basis of the player's operations, the shape of said object, the pattern of change in this object, the type of texture data applied to this object, or the type of sound emitted when said object changes shape. Strandberg teaches this at figures 2-8, with sound being taught at column 5 line 37 to column 6 line 7.

Claim 25 further requires said presentation control means to display at least one other object which is different to said object, and changes the shape of this other object also. Strandberg teaches this at column 6 lines 31-54; for example, shadows.

Claim 26 further requires said presentation control means to conduct a presentation wherein prescribed illumination is provided in accordance with changes in the shape of said object; and claim 27 further requires said presentation control means to conduct a presentation wherein a prescribed image pattern appears in a position corresponding to the foreground or background of said object, in accordance with the change in the shape of said object. Strandberg teaches these features at column 6 lines 31-54.

Claim 29 further requires said viewpoint determining means to change the relative position information of said viewpoint to said object on the basis of the player's operations. Strandberg teaches this at column 6 lines 18-26.

Claim 35 is similar to claim 21, however, is presented in method form. The arguments applied to the rejection of claim 21, above, apply to claim 35 as well because the method steps of claim 35 are inherent in the apparatus functions of claim 21.

Claim 36 further requires implementations in a computer to be recorded. Strandberg teaches this at column 8 lines 7-9.

3. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strandberg in view of Watt and further in view of Kakizawa et al. as applied to claim 21 above, and further in view of Tsuga et al.

Claims 31-33 are specifically directed to the recording means portion of the image processing device. While Strandberg teaches this recording means at figure 1 item 12 and at column 10 lines 48-63, it is noted that the various claimed functions of the recording means are not explicitly taught. However, it was well known that recording means provided the functions claimed. Tsuga et al. is applied as a reference to show that the claimed functions were known and used on recording means as claimed.

Claims 32 and 33 further require said recording means to reproduce a recorded series of images at a different speed (claim 32), and in a different sequence (claim 33), to that used when recording these images. According to the instant specification, these

limitations are defines as "fast-forward" and "rewind". Tsuga et al. Teaches these features at column 27 line 3.

Claim 31 further requires said recording means to reproduce a recorded series of images at the same speed as that used when recording these images. This is inherent in the recorder of Tsuga et al. Replay provides the recorded speed by default. This is clearly indicated with the teaching of a "fast forward" because "fast forward" is a speed other than the default normal speed, which normal speed has always been standard.

It would have been obvious to one of ordinary skill in the art to include well known features, such as normal speed, fast forward, and rewind, of recording devices because one could move forward and backward in a given recording at a fast speed to save time, and to use normal speed for enjoyment.


4. Claims 28, 30, and 34 are allowed.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almis R Jankus whose telephone number is 703-305-9795. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 703-305-9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AJ



ALMIS R. JANKUS
PRIMARY EXAMINER